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CLINICAL EVALUATION OF SIDDHA VARMAM POINTS AND EXTERNAL MANIPULATIVE THERAPY FOR CHRONIC LOW BACK PAIN (THANDAGA VATHAM)

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ABSTRACT

Background: Thandaga Vatham, a clinical condition described in Siddha medicine, is characterized by lumbar pain radiating to the lower limbs and corresponds closely with lumbar spondylosis or mechanical low back pain in modern medicine. Middle-aged men engaged in occupations requiring prolonged standing or long-distance travel are particularly susceptible to this condition (Manchikanti et al., 2014; Brinjikji et al., 2015). Siddha Varmam therapy, which involves stimulation of vital energy points (Varmam pulligal), offers a unique therapeutic approach for musculoskeletal disorders (Elango, Arulmozhi, & Subramanian, 2018).

Objective: This randomized controlled trial aimed to evaluate the efficacy of Siddha Varmam therapy combined with medicated oil massage in reducing pain, improving functional disability, and inducing radiological improvement in patients with Thandaga Vatham.

Methods: Sixty male subjects aged 35 to 50 years with CT-confirmed Thandaga Vatham and chronic lumbar pain were randomized into two groups: Group A received Siddha Varmam therapy plus medicated oil massage, and Group B received standard lifestyle modification. Interventions were administered daily, five days a week, for 12 weeks. Primary outcome was functional disability assessed by the Quebec Back Pain Disability Scale (QBPDS). Secondary outcomes included pain intensity (Visual Analog Scale) and radiological changes via CT scan.

Results: Repeated measures ANOVA revealed significant improvements in QBPDS scores in the experimental group compared to controls ($F(2,116) = 23.67$, $p < .001$). Pain intensity similarly decreased significantly ($F(2,116) = 19.53$, $p < .001$). Paired t-tests demonstrated significant radiological improvement in disc space height and facet joint degeneration in Group A ($t(29) = 4.23$, $p < .001$), with no significant changes in controls. These findings align with Siddha principles attributing therapeutic effects to Varmam point stimulation modulating neural and energy pathways (Subramanian, Arulmozhi, & Elango, 2016; Rajendran & Annamalai, 2019).

Conclusion: Siddha Varmam therapy combined with medicated oil massage significantly reduces pain and disability and improves spinal structure in Thandaga Vatham patients. This integrative approach offers a promising complementary treatment for lumbar spondylosis, warranting further large-scale studies to confirm long-term benefits and underlying mechanisms.

Keywords: Thandaga Vatham, Lumbar Spondylosis, Siddha Medicine, Varmam Therapy, Low Back Pain, Randomized Controlled Trial

1. INTRODUCTION

Thandaga Vatham, as delineated in Siddha literature, is a clinical condition characterized by pain localized in the lumbar region, often radiating to the lower limbs. This condition is primarily attributed to the derangement of Vatha Kuatram, one of the three fundamental humors governing physiological functions in Siddha medicine (Kuppusamy Muthaliyar, 2010; Sambasivapillai, 1938). The disease manifests with symptoms that bear a striking resemblance to Lumbar Spondylosis or mechanical low back pain as understood in contemporary medicine, involving degenerative changes in the lumbar spine and associated neural structures (Shenbagaraj et al., 2025).

The prevalence of low back pain, particularly mechanical in origin, is a significant cause of disability worldwide, affecting quality of life and productivity. Middle-aged men, especially those between the ages of 35 and 50, are increasingly vulnerable to this condition due to occupational and lifestyle factors such as prolonged standing, repetitive strain, long-distance travel, and occupational injuries (P et al., 2020). These physical stressors contribute to the degeneration of intervertebral discs, facet joints, and surrounding soft tissues, leading to characteristic pain and functional limitation (Nagarajan et al., 2019).

Siddha medicine, an ancient Indian traditional system, offers unique therapeutic approaches that emphasize balance among the three humors—Vatha, Pitha, and Kapha—for maintaining health and managing disease (Yogi Maamunivar, 2005). Varmam therapy, a specialized subset of Siddha therapeutics, targets vital points known as Varmam pulligal, which are believed to be centers of life energy or Prana. These points, when stimulated appropriately, are said to restore physiological balance and promote healing by influencing nerve pathways, circulation, and energy flow (Kannan Rajaram & Mohanaraj, 2011; Alagappan, 2014).

Among the various Varmam points, Nanguna Poottu and Chippi Varmam have traditionally been implicated in the management of spinal ailments, particularly those involving Vatha disturbances. Nanguna Poottu, located along the lumbar paraspinal region, and Chippi Varmam, situated near the sacroiliac area, are believed to modulate nerve conduction and alleviate musculoskeletal pain through precise manual stimulation (Thirumalai & Kannan, cited in Baskaran et al., 2025).

Despite the rich heritage of Siddha medicine and anecdotal clinical success with Varmam therapy, there is a paucity of systematic scientific studies validating the efficacy of these techniques in managing lumbar spinal conditions. Shenbagaraj et al. (2025) reported significant improvement in lumbar spondylosis symptoms after non-invasive Siddha Varmam therapy during a 48-day treatment period, with sustained benefits observed at six-month follow-up. Similarly, P et al. (2020) demonstrated clinical relief in low back pain and walking difficulty after Varmam therapy in a cohort of 200 patients with Thandaga Vatham. Sikarwar (2026)

These studies provide promising evidence for the efficacy of Varmam therapy in managing lumbar spondylosis, aligning with the traditional Siddha understanding of Thandaga Vatham. However, further rigorous clinical trials are necessary to substantiate these findings and elucidate the underlying mechanisms of action.

This study aims to bridge the gap between traditional Siddha medicine and contemporary clinical research by investigating the impact of stimulating specific Varmam points, such as Nanguna Poottu and Chippi Varmam, on restoring spinal health and alleviating symptoms in patients with Thandaga Vatham. By integrating traditional Siddha knowledge with modern clinical methodologies, this research seeks to provide a holistic understanding of the therapeutic potential of Varmam therapy in managing mechanical low back pain, thus offering an alternative or complementary approach to conventional treatment modalities.

2. METHODOLOGY

This randomized controlled trial (RCT) was conducted to evaluate the efficacy of Siddha Varmam therapy combined with medicated oil massage in managing Thandaga Vatham, a clinical condition corresponding to lumbar spondylosis. Sixty male participants, aged 35 to 50 years, were randomly assigned to either the experimental or control group using a computer-generated randomization sequence to minimize selection bias (Schulz, Altman, & Moher, 2010). Clinical Trials Registry – India (CTRI/2024/10/074878) and has received ethical approval from the Institutional Human Ethics Committee of Meenakshi Academy of Higher Education and Research (MAHER) , and written informed consent was secured from all participants.

Group A (Experimental): Received Siddha Varmam therapy alongside medicated oil massage.

Group B (Control): Received standard lifestyle modification advice and placebo intervention.

2.1. INCLUSION CRITERIA

Participants were included if they met the following criteria:

Male, aged 35–50 years, reflecting the demographic commonly affected by mechanical low back conditions (Manchikanti et al., 2014).

Radiological confirmation of Thandaga Vatham via lumbar CT scan showing degenerative spinal changes consistent with lumbar spondylosis (Brinjikji et al., 2015).

Chronic low back pain related to prolonged standing or long-distance travel, with a history consistent with mechanical stress-related pathology (Hoy et al., 2014).

2.2. INTERVENTION PROTOCOL

The intervention lasted three months, with therapy sessions held five days per week (Monday to Friday). Each session was 30 minutes in duration, consisting of:

Medicated Oil Massage: Therapeutic application of Siddha medicated oil over the lumbar region for 15 minutes, aimed at improving tissue perfusion, reducing muscle stiffness, and facilitating subsequent Varmam therapy (Elango, Arulmozhi, & Subramanian, 2018).

Varmam Therapy: Manual stimulation of vital Varmam points—Nanguna Poottu, Jada Bril Varmam, and Chippi Varmam—for 15 minutes. These points are traditionally associated with regulation of Vatha disturbances and are believed to modulate nerve conduction and enhance energy flow (Subramanian, Arulmozhi, & Elango, 2016; Rajendran & Annamalai, 2019).

The therapy was administered daily for five consecutive days each week, totaling 90 sessions over the 12-week period.

2.3. OUTCOME MEASURES

Primary Outcome: Functional disability was measured using the Quebec Back Pain Disability Scale (QBPDS), a validated and reliable self-report instrument widely used in low back pain research (Kopec et al., 1995). Assessments were performed at baseline, six weeks, and post-intervention (12 weeks).

Secondary Outcome: Lumbar spine structural changes were assessed via CT scans at baseline and post-intervention to evaluate anatomical improvements, including disc space narrowing and facet joint degeneration (Brinjikji et al., 2015).

Additional Assessments: Pain intensity was recorded using the Visual Analog Scale (VAS), and quality of life was assessed with the SF-36 questionnaire to provide holistic evaluation of therapeutic effects (Fairbank & Pynsent, 2000).

3. RESULTS

Table1

Table 1 Changes in Quebec Back Pain Disability Scale (QBPDS) and Visual Analog Scale (VAS) Scores Over Time

Clinical Tests	Group	Baseline Mean (SD)	6 Weeks Mean (SD)	12 Weeks Mean (SD)	F (Time × Group)	p-value
QBPDS Score	Experimental	48.6 (8.2)	36.2 (7.5)	27.5 (6.9)	23.67	< .001
Control	47.9 (7.9)	45.8 (7.7)	44.9 (7.8)			
VAS Score	Experimental	7.4 (1.1)	5.1 (1.3)	3.6 (1.2)	19.53	< .001
Control	7.2 (1.0)	6.8 (1.0)	6.6 (1.1)			

QBPDS: Quebec Back Pain Disability Scale (higher scores indicate greater disability).

VAS: Visual Analog Scale for pain intensity (0 = no pain, 10 = worst pain).

Table 2

Table 2 Radiological Changes in Lumbar Spine (CT Scan Scores) Pre- and Post-Intervention

Group	N	Pre-Intervention Mean (SD)	Post-Intervention Mean (SD)	Paired t-test (t)	p-value
Experimental	30	3.8 (0.6)	2.9 (0.5)	4.23	< .001
Control	30	3.9 (0.7)	3.7 (0.6)	1.12	0.27

(Radiological scores represent the degree of spinal degeneration, with higher scores indicating more severe degeneration.)

Sixty male participants were enrolled and randomized equally into two groups (n = 30 each). There were no significant differences between groups at baseline in age, pain duration, or initial Quebec Back Pain Disability Scale (QBPDS) scores ($p > 0.05$), indicating successful randomization.

1) Functional Disability (QBPDS Scores)

Repeated measures ANOVA was conducted to evaluate the effect of the intervention on QBPDS scores over three time points (baseline, 6 weeks, and 12 weeks) across the two groups.

There was a significant main effect of time, $F(2, 116) = 85.42$, $p < .001$, indicating that disability scores changed significantly over the intervention period.A significant interaction effect between time and group was observed, $F(2, 116) = 23.67$, $p < .001$, demonstrating that the experimental group's improvement differed significantly from the control group over time.

Post hoc analysis (Bonferroni correction) showed that Group A (Varmam with oil massage) exhibited a significant reduction in QBPDS scores from baseline to 6 weeks (mean difference = 12.4, $p < .001$) and from 6 weeks to 12 weeks (mean difference = 8.7, $p < .001$). Group B showed only minimal, non-significant changes.

2) Pain Intensity (Visual Analog Scale Scores)

Similar repeated measures ANOVA revealed a significant time by group interaction, $F(2, 116) = 19.53$, $p < .001$. Group A reported a greater reduction in pain intensity compared to Group B across the treatment period.

3) Radiological Assessment (CT Scan Findings)

Paired t-tests were used to compare baseline and post-intervention radiological scores within each group: In Group A, CT scans demonstrated a statistically significant improvement in lumbar disc space height and reduction in facet joint degeneration scores after 12 weeks ($t(29) = 4.23$, $p < .001$). In Group B, no significant changes were observed ($t(29) = 1.12$, $p = .27$).

Quality of Life (SF-36 Scores) .Repeated measures ANOVA indicated significant improvements in physical functioning and bodily pain domains in Group A compared to Group B ($p < .01$).

4. DISCUSSION

This randomized controlled trial evaluated the therapeutic effect of Siddha Varmam therapy combined with medicated oil massage on patients with Thandaga Vatham, a condition that closely parallels lumbar spondylosis or mechanical low back pain in modern clinical terms. The findings demonstrated significant improvements in functional disability, pain intensity, and radiological markers of spinal degeneration in the experimental group compared to controls receiving standard lifestyle advice.

The reduction in Quebec Back Pain Disability Scale (QBPDS) scores observed aligns with previous Siddha studies that reported enhanced mobility and reduced disability following Varmam therapy (P et al., 2020; Rajendran & Annamalai, 2019). The mechanistic basis for these improvements may lie in the stimulation of specific Varmam points such as Nanguna Poottu and Chippi Varmam, which are believed to modulate the flow of vital energy (Prana) and influence neural pathways to reduce nociceptive signaling (Elango, Arulmozhi, & Subramanian, 2018; Subramanian, Arulmozhi, & Elango, 2016).

The significant decrease in pain intensity measured by the Visual Analog Scale (VAS) suggests that Varmam therapy provides effective analgesia, potentially mediated by neurophysiological mechanisms similar to acupuncture and acupressure, such as activation of endogenous opioid pathways and modulation of spinal cord transmission (Zhao, 2008). Additionally, the use of medicated oil massage likely contributed by improving local circulation, reducing muscle

spasm, and enhancing tissue pliability, which supports findings from other traditional medicine studies emphasizing the synergistic role of oil massage in musculoskeletal pain management (Rajendran & Annamalai, 2019).

Radiological improvements noted on CT imaging, including increased disc space height and reduced facet joint degeneration, are particularly noteworthy. While structural reversal of spinal degeneration is challenging, these findings may reflect a reduction in inflammatory edema and improved joint biomechanics facilitated by the therapy. This aspect warrants further investigation but echoes reports in integrative medicine research where manual therapies have been associated with positive structural and functional spinal outcomes (Brinjikji et al., 2015; Lo et al., 2017).

The study further supports the Siddha principle that balancing the Vatha through targeted Varmam stimulation can restore physiological homeostasis and alleviate chronic musculoskeletal conditions (Kannan Rajaram & Mohanaraj, 2011). The holistic approach integrating physical stimulation with herbal medicated oils highlights the potential for complementary therapies in managing complex spinal disorders, especially in populations vulnerable to occupational strain.

Limitations of this study include the relatively small sample size and short follow-up duration. Future studies should incorporate larger cohorts, longer follow-up to assess durability of effects, and exploration of biochemical markers to elucidate underlying mechanisms. Additionally, objective functional assessments such as gait analysis and electromyography could provide further insight into neuromuscular improvements.

In summary, this study provides compelling evidence that Siddha Varmam therapy combined with medicated oil massage is effective in reducing pain, improving function, and favorably influencing spinal structure in patients with Thandaga Vatham. The integration of traditional Siddha practices with modern clinical evaluation offers a promising avenue for holistic management of lumbar spondylosis and related low back pain syndromes.

5. CONCLUSION

The present randomized controlled trial demonstrates that Siddha Varmam therapy coupled with medicated oil massage significantly alleviates pain, reduces disability, and induces positive radiological changes in men with Thandaga Vatham. These findings validate the therapeutic potential of Siddha Varmam as a safe, non-invasive, and effective treatment modality for lumbar spondylosis. Incorporation of Siddha Varmam therapy in integrative clinical practice could enhance outcomes for patients suffering from chronic mechanical low back pain, particularly those with occupational risk factors. Further large-scale studies are warranted to confirm these benefits and explore the underlying biological mechanisms.

CONFLICT OF INTERESTS

None.

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